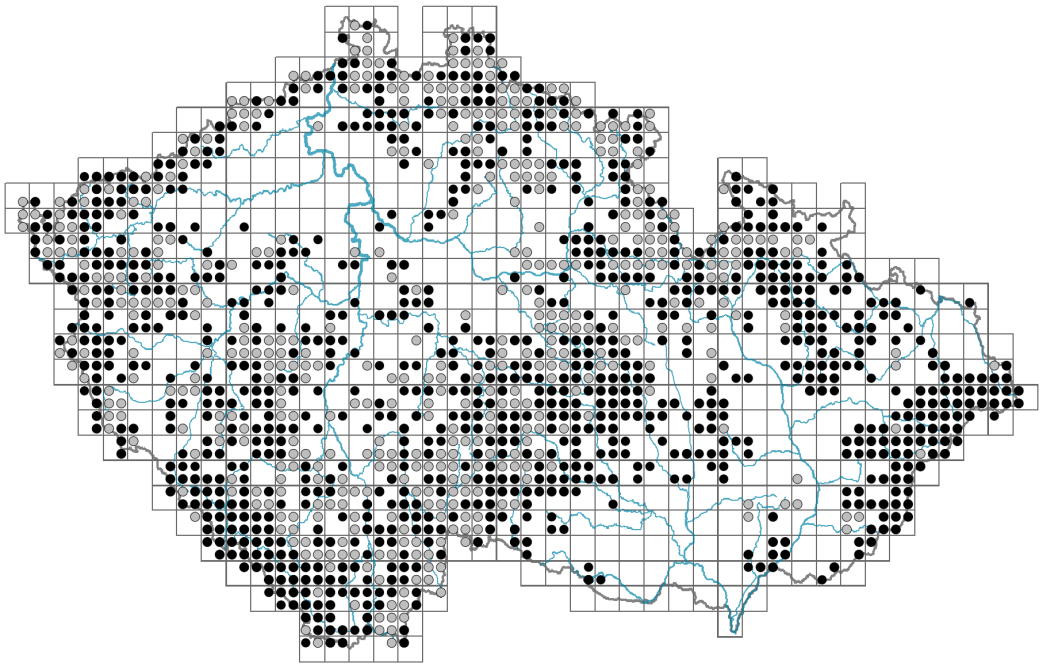
Carex echinata

Distribution





Map info

revised records

unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.







Habitus and growth type

Height [m]: **0.1–0.3**
Growth form: **clonal herb**
Life form: **hemicryptophyte**
Life strategy: **CSR – competitor/stress-tolerator/ruderal**
Life strategy (Pierce method based on leaf traits): **S/SR**
Life strategy (Pierce method, C-score): **9.5 %**
Life strategy (Pierce method, S-score): **71.9 %**
Life strategy (Pierce method, R-score): **18.6 %**

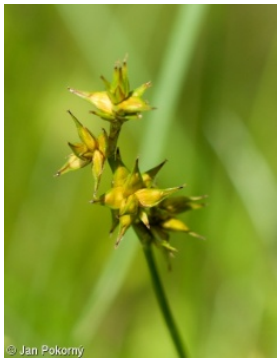
Leaf

Leaf presence and metamorphosis: **leaves present, not modified**
Leaf arrangement (phyllotaxis): **alternate**
Leaf shape: **simple – entire**
Stipules: **absent**
Petiole: **absent**
Leaf life span: **evergreen**
Leaf anatomy: **helomorphic**

Flower

Flowering period [month]: **May–July**

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Flowering phase: **5 Sorbus aucuparia-Galium odoratum (end of mid-spring)**
Flower colour: **green**
Perianth type: **flower achlamydeous**
Inflorescence type: **spica e spiculis composita**
Dicliny: **monoecious**
Generative reproduction type: **facultative allogamy**
Pollination syndrome: **wind-pollination**

Fruit, seed and dispersal



Fruit type: **dry fruit – nut enclosed in an utricle**
Fruit colour: **brown, grey**
Reproduction type: **by seed/spores and vegetatively**
Dispersal unit (diaspore): **fruit, infrutescence or its part**
Dispersal strategy: **Allium (mainly autochory)**
Myrmecochory: **probably non-myrmecochorous**

Belowground organs and clonality



Shoot metamorphosis: **stolon, rhizome**
Storage organ: **stolon, rhizome, tuft**
Type of clonal growth organ: **epigeogenous rhizome**
Freely dispersible organs of clonal growth: **absent**
Shoot life span (cyclicity): **dicyclic or polycyclic shoots prevailing**
Branching type of stem-derived organs of clonal growth: **sympodial**
Primary root: **absent**
Persistence of the clonal growth organ [year]: **4**
Number of clonal offspring: **4.6**
Lateral spreading distance by clonal growth [m]: **0.04**
Clonal index: **4**

Bud bank



Number of buds per shoot at the soil surface (root buds excluded): **5**
Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **15**
Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **0**
Size of the belowground bud bank (root buds excluded): **20**
Depth of the belowground bud bank (root buds exluded) [cm]: **4**
Number of buds per shoot at the soil surface (root buds included): **5**
Number of buds per shoot at a depth of 0–10 cm (root buds included): **15**
Number of buds per shoot at a depth greater than 10 cm (root buds included): **0**
Size of the belowground bud bank (root buds included): **20**
Depth of the belowground bud bank (root buds included) [cm]: **4**

Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**
Carnivory: **non-carnivorous**
Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

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Karyology

Chromosome number (2n): **58**
Ploidy level (x): **2**
2C genome size [Mbp]: **733.25**
1Cx monoploid genome size [Mbp]: **366.63**
Genomic GC content: **36.7 %**

Taxon origin

Origin in the Czech Republic: **native**

Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **7 – half-light plant, mostly occurring at full light, but also in the shade up to about 30% of diffuse radiation incident in an open area**
Temperature indicator value: **5x – moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas (generalist)**
Moisture indicator value: **8 – transition between values 7 and 9**
Reaction indicator value: **3 – acidity indicator, occurring mainly in acidic conditions, exceptionally in neutral conditions**
Nutrient indicator value: **3 – occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**
Salinity indicator value: **0 – not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.03**
Herb layer disturbance frequency indicator value: **-0.66**
Whole-community disturbance severity indicator value: **0.17**
Herb layer disturbance severity indicator value: **0.19**
Whole-community structure based disturbance indicator value: **0.5**
Herb layer structure-based disturbance indicator value: **0.6**

Habitat and sociology

Occurrence in habitats

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **1 – rare occurrence**

4 Wetland and riverine herbaceous vegetation

4E Reed vegetation of brooks: **1 – rare occurrence**
4F Mesotrophic vegetation of muddy substrata: **1 – rare occurrence**
4G Tall-sedge beds: **1 – rare occurrence**

5 Vegetation of springs and mires

5B Lowland to montane soft-water springs: **1 – rare occurrence**
5C Alpine and subalpine soft-water springs: **2 – optimum**
5D Calcareous fens: **2 – optimum**
5E Acidic moss-rich fens and peatland meadows: **2 – optimum**
5F Transitional mires: **2 – optimum**

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5G Raised bogs: **1 – rare occurrence**
5H Wet peat soils and bog hollows: **2 – optimum**

6 Meadows and mesic pastures

6C Pastures and park grasslands: **1 – rare occurrence**
6D Alluvial meadows of lowland rivers: **1 – rare occurrence**
6E Wet Cirsium meadows: **2 – optimum**
6F Intermittently wet Molinia meadows: **2 – optimum**
6G Vegetation of wet disturbed soils: **1 – rare occurrence**

7 Acidophilous grasslands

7A Subalpine and montane acidophilous grasslands: **1 – rare occurrence**
7B Submontane Nardus grasslands: **1 – rare occurrence**

10 Saline vegetation

10J Saline steppes: **1 – rare occurrence**

11 Heathlands and scrub

11I Willow carrs: **1 – rare occurrence**

12 Forests

12A Alder carrs: **1 – rare occurrence**
12B Alluvial forests: **1 – rare occurrence**
12L Boreo-continental pine forests: **1 – rare occurrence**
12P Peatland pine forests: **1 – rare occurrence**
12Q Peatland birch forests: **2 – optimum**
12R Acidophilous spruce forests: **2 – optimum**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **2.2 – taxon occurring partly in the forest, but mainly in open vegetation**
Affinity to the forest environment in Mesophyticum and Oreophyticum: **2.2 – taxon occurring partly in the forest, but mainly in open vegetation**

Diagnostic taxon

Diagnostic taxon of classes: **RB *Scheuchzerio palustris-Caricetea nigrae***
Diagnostic taxon of alliances: **RBB *Sphagno warnstorfii-Tomentypnion nitentis***, **RBC *Caricion canescenti-nigrae***, **RBD *Sphagno-Caricion canescentis***
Diagnostic taxon of associations: **RAD02 *Swertietum perennis***, **RBA03 *Valeriano simplicifoliae-Caricetum flavae***, **RBB01 *Sphagno warnstorfii-Eriophoretum latifolii***, **RBB02 *Campylio stellati-Trichophoretum alpini***, **RBC01 *Caricetum nigrae***, **RBC04 *Bartsio alpinae-Caricetum nigrae***, **RBC05 *Calliergo sarmentosi-Eriophoretum angustifolii***, **RBD03 *Carici echinatae-Sphagnetum***, **TDF03 *Angelico sylvestris-Cirsietum palustris***

Constant taxon

Constant taxon of classes: **RB *Scheuchzerio palustris-Caricetea nigrae***
Constant taxon of alliances: **RBC *Caricion canescenti-nigrae***, **RBD *Sphagno-Caricion canescentis***
Constant taxon of associations: **RAD02 *Swertietum perennis***, **RBA03 *Valeriano simplicifoliae-Caricetum flavae***, **RBB01 *Sphagno warnstorfii-Eriophoretum latifolii***, **RBB02 *Campylio stellati-Trichophoretum alpini***, **RBC01 *Caricetum nigrae***, **RBC04 *Bartsio alpinae-Caricetum nigrae***, **RBC05 *Calliergo sarmentosi-Eriophoretum angustifolii***, **RBD03 *Carici echinatae-Sphagnetum***, **TDF03 *Angelico sylvestris-Cirsietum palustris***

Dominant taxon

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Dominant taxon of associations: **RBD03 *Carici echinatae-Sphagnetum***

Ecological specialization indices

Ecological specialization index for all vegetation types: **5.7**
Ecological specialization index for non-forest vegetation: **5.8**
Ecological specialization index for forest vegetation: **5.1**

Colonization ability

Index of colonization success (ICS): **6**
Index of colonization potential (ICP): **4**
Optimum successional age [years]: **4**

Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional, subtropical, austral or antarctic**
Floristic region: **circumpolar**
Distribution range extension along the continentality gradient: **5**
Elevational belt in the Czech Republic: **colline belt, submontane belt, montane belt**
Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 539
taxon.data.freq_in_quad: 1396

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **2.3 %**
Occurrence frequency in vegetation plots with a cover above 5%: **16.7 %**
Occurrence frequency in vegetation plots with a cover above 25%: **3.5 %**
Occurrence frequency in vegetation plots with a cover above 50%: **0.9 %**
Mean percentage cover in vegetation plots: **5.1 %**
Maximum percentage cover in vegetation plots: **99 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **26**
Number of narrow habitats in which the taxon has its optimum: **9**
Number of broad habitats in which the taxon occurs: **8**
Number of broad habitats in which the taxon has its optimum: **3**

Threats and protection

Red List 2017 (national categories): **taxon is not on the Red List**
Red List 2017 (IUCN categories): **LC(NA) – least concern (taxon is not on the Red List)**
Legal protection: **not protected by law**

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